

ON THE STATUS OF THE NAMES APLYSIA AND TETHYS.

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In the course of my studies on the "Sea Hares," preliminary to the preparation of a monograph of this group of Tectibranch Mollusks for the Manual of Conchology, my attention was early forced to the fact that in Linnæus' Tenth Edition of the *Systema Naturæ* the genus *Tethys* was proposed for the animal now known as *Aplysia*, and included nothing else. Moreover, by the terms of the generic diagnosis, such creatures as that known as *Tethys* in modern times are excluded.

In the Twelfth Edition of the *Systema*, *Tethys* is given a completely different meaning; and the new term *Aplysia* (*Laplysia*) is brought forward to include the species of the earlier *Tethys*. This later usage has been accepted by zoologists until the present day.

The question then arises, shall we apply to Linnæus himself the canons of nomenclature which would be rigorously enforced were the claims of his successors in question? It is with a view to obtaining the opinions of those who are expert in these matters that we present below a full synopsis of the literature bearing upon the questions at issue.

The facts in this case have doubtless been fully unearthed by many investigators; but probably believing it best to "let sleeping dogs rest" no one¹ has to my knowledge seriously raised the questions to which I desire now to direct attention.

The genus *Tethys* was founded by Linné in the tenth edition of the *Systema Naturæ*, p. 653, for two species, thus:

"254. TETHYS. *Corpus* oblongum, bilabiarum: corpusculo medio cartilagineo oblongo. *Tentacula* duo, cuneiforma. *Foramina* duo, spirantia.

"limacina 1. T. auriculis quatuor.

Habitat in Oceano Australi.

¹Except R. Bergh, who in *Mal. Unters.* I, p. 33, in Semper's *Reisen*, 2ter Theil, has made the bald statement that Linnæus' earlier *Tethys* was an *Aplysia*, but who continues to use *Tethys* for the Nudibranch.

Corpus oblongum, antice quasi 4 auriculis acutis instructum.

“*leporina*. 2. T. corpore rubro, margine membranaceo, auriculis duobus.

[a] *Roud. pisc.* 1. p. 520. *Lepus marinus*.

[b] *Bell. aquat.* 437. *Lepus marinus*.

[c] *Gesu. aquat.* 475. *Lepus marinus*. *Aldr. exsangu.* 78.

Lepus marinus 1.

Habitat in M. Mediterraneo.

Conf. Column. aqu. t. 26, f. 2, 3.”

It will be noticed that the above description of *limacina* contains nothing diagnostic of a species, though the genus is clearly indicated. As Linné gives us no reference to earlier writers, we have absolutely no means of learning what *Tethys limacina* is, and the name must be dropped.

In the case of *leporina*, Linné gives ample references to the sources whence his information was derived. These we analyze as follows: [a] Gulielmi Rondeletii, etc., *Libri de Piscibus Marinis*, etc. (1554), Liber xvii. p. 520, figures an *Aplysia* which seems to be the *A. fasciata* of authors (for it lacks the conspicuous shell-foramen of *depilans*, and the broadly united parapodia of *punctata*). [b] *La Nature & diversité des poissons, avec leurs pourtraicts, representez au plus pres du naturel, par Pierre Belon du Mans* (Paris, 1555), p. 437, seems to be an undeterminable species of “*Lievre Marin*” from the Cyclades, known to Belon through the ancient authors only. [c] *Conradi Gesneri medici Tigurini Historiæ Animalium, Liber III. qui est de Piscium & Aquatiliū Animantium natura* (1558), p. 561 (Linné wrongly gives 475 as the page). A reversed copy of Rondelet’s figure is given, Gesner’s information being wholly second hand. [d] *Ulyssis Aldrovandi etc., De Reliquis Animalibus exanguibus, libri quatuor, post mortem eius editi Nempe De Mollibus, Crustaceis Testaceis, et Zoophytis* (1606), *De Mollibus, liber I*, p. 78. In this work, which is purely a compilation, all of Rondelet’s figures again do service, and Linnæus’ reference will naturally be confined to the first of these. Aldrovandus also figures (p. 82) a couple of species of *Doris* as “*Leporis marini alia species*,” and (p. 83) two other figures possibly representing *Aclesia*. Linné’s “*conf. Columna*” refers us to figures of the Nudibranch commonly known as *Tethys fimbria*; but this figure is merely cited for comparison, not as a representation of the species *T. leporina*.

It would therefore seem that Linné originally intended *Tethys* for the *Aplysia* species, his generic diagnosis and references unmistakably indicating the "*Lepus marinus*" of the early zoological renaissance authors.

In the Twelfth Edition of the *Systema*, p. 1089, Linné wholly alters the diagnosis of *Tethys* as follows:

"289. TETHYS. *Corpus* liberum, oblongiusculum, carnosum, apodum. *Os* proboscide terminale, cylindrica, sub labis explicato. *Foramina* 2 ad latis colli sinistrum.

"leporin. 1. T. labro ciliato. †

Column. aquat. 27. †. 26. *Lepus marinus* major.

Rondel. pisc. 526. *Leporis marini* tertia species.

Habitat in Mari Mediterraneo.

"fimbria. 2. T. labro crenulato.

Bohads. mar. 54 t. 5. f. 1, 2. *Fimbria*.

Habitat in mari adritico.

Videtur a precedenti distincti species."

All of these references belong to the one Mediterranean species (see Bergh in Semper's *Reisen*, 2ter Theil, ii, p. 348), known as *Tethys fimbria* or *leporina*.¹

On page 1,082 of the Twelfth Edition, the new genus *Aplysia* or *Laplysia*² is proposed, thus:

"283. LAPLYSIA. *Corpus* repens, obvelatum membranis reflexis.

Clypeo dorsali, membranaceo, pulmones obtegente.

Foramen laterale, dextrum, pro genitalibus.

Anus supra extremitatem dorsi.

¹ The specific name of this Nudibranch must stand *fimbria* Linn.; the binomial combination *Tethys leporina* being preoccupied by Linnæus 1758. The synonymy of the genus is as follows:

1761. *Fimbria* Bohadsch, 1761. (a mononym).

1767. *Tethys* L. 1767, not *Tethys* L. 1758.

1801. *Tethys* Lam., Syst. An. s. Vert. p. 63.

1808. *Thetys* Cuvier, Ann. du Mus. d'Hist. Nat. X11, p. 257.

1808. *Thetis* Meckel, Beytr. zu vergleich. Anat. I. i. p. 9, not *Thetis* J. Sowb. Min. Conch. 1826.

1817?. *Thetys* Fér., Tabl. Syst. p. 28.

1819. *Phoenicurus* Rudolphi, Entozoorum Synopsis, p. 573.

1823. *Vertumnus* Otto, Nov. A. Ac. C. Leop. Nat. Cur. XI, pp. 294-300.

Of these names the first was not distinctly proposed as a genus, Bohadsch's nomenclature being strictly mononymic. The seventh and eighth were founded on minute appendages of the animal, supposed to be parasitic worms, and certainly the genus could not be identified by these descriptions. The other names are variants on Linnæus' original *Tethys*.

² The spelling "*Laplysia*" is evidently a typographical error or oversight, for the first use of the word, on page 1,072 of the *Syst. Nat.* 12, is in the correct form "*Aplysia*." The generic diagnosis given on this page is brief, but sufficient: "283. *Aplysia* Tentacula 4. Anus supra postica."

Tentacula quatuor, antcrius sita.

“*depilans*. 1. LAPLYSIA.

Syst. Nat. 10. p. 653. *Tethys limacina*.

Rond. pisc. 1. p. 520. *Lepus marinus*.

Gesn. aquat. 475. *Lepus marinus* Rondeletii.

Bohads. mar. 3. t. 1, 2, 3. *Lerneæ graphice*.

Seb. mus. 3. t. 1, f. 8, 9.

Habitat in M. Mediterraneo; *sanie depilans tactu*.

(B. 51.) *foetidissima ad nauseam usque*.”

The description of the genus is implied for the species *depilans*, and it is also said to be the *Tethys limacina* of the Tenth Edition.¹ The second reference is to the same figure of Rondelet formerly cited for *Tethys leporina*. The third reference repeats the earlier citation to Gesner, with the same mistake as to the page. The fourth reference is to the excellent figure of Bohadsch's *Lerneæ*, representing unmistakably the *Aplysia depilans* of authors. The reference to Seba is less happy, the figures being too ambiguous for certain determination. It is perfectly evident that Linnæus' generic characters of *Laplysia* were derived from Bohadsch's work; and as the best figures are from the same source, the traditional identification of *depilans* is fully sustained.

SUMMARY.—From the foregoing facts it would appear that (1) the generic name *Tethys* Linn. 1758, must replace *Aplysia* and *Laplysia* Linn. 1767. And (2) as a substitute for *Tethys* Linn. 1767 not 1758, we will probably be compelled to adopt either one of the new spellings of this name proposed in the early part of the century or an entirely new generic term.

¹ We would not replace the specific name *depilans* by *limacina*, because the latter was not recognizably defined in Linnæus' earlier edition.